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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,377	11/18/2003	Martin James Starkey	1-24916	4378

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MACMILLAN SOBANSKI & TODD, LLC
ONE MARITIME PLAZA FOURTH FLOOR
720 WATER STREET
TOLEDO, OH 43604-1619

EXAMINER

SALVATORE, LYNDIA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/716,377	STARKEY ET AL.	
	Examiner	Art Unit	
	Lynda M. Salvatore	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 17-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 21, 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/18/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-16 and 21-22 in the reply filed on 07/21/05 is acknowledged.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the resin retention structure. In figures 1 and 3, it appears that reference numbers 18 and 108 also point to the resin conducting material 14 and 104. It is not possible from Applicant's figures to determine what constitutes the resin retention structure. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the

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examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1,3, and 21 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a composite comprising a surface resin layer, a conducting layer, a resin retention layer, and/or a reinforcement layer does not reasonably provide enablement for limitation of “said resin conducting layer further *providing* a resin retention structure” and “said resin conducting layer comprising a venting structure”. Specifically, there is no disclosure enabling how the conducting layer provides a resin retention structure or how the resin conducting structure comprises a venting structure. It is not clear from the specification and/or claims if the resin conducting layer is made up of a separate venting structure and a separate resin retention structure or if the conducting layer functions to vent gases and provide resin retention. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Claims 2, 4-16, are rejected for their dependency on claims 1 and 3.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 1,3,4,7,16, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. With regard to claims 1,3,16 and 21 it is not clear to the Examiner how the conducting layer *provides* a resin retention structure. Further, it is not clear from the claims what, if anything, constitutes the venting structure and the resin retention structure. It is not clear from the specification and/or claims if the resin conducting layer is made up of a separate venting structure and a separate resin retention structure or if the conducting layer functions to vent gases and provide resin retention. For purposes of examination, the resin conducting layer limitation will be treated as single layer functioning to vent gases and retain resin.

8. Regarding claim 4, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

9. Claim 7 is indefinite because it is not clear to the Examiner which "material" in claim 3 further comprises a further resin conducting layer. In addition, it is not clear if the further resin conducting layer functions to vent gases or if it is a multi-layer structure comprising a separate venting layer. Thus, it is not possible to determine the scope of claim 7.

Claim Rejections - 35 USC § 102/103

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-16,21 and 22 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ness et al., WO 00/27632.

The published PCT application issued to Ness et al., teach a multi-layered moulding material comprising a resin material applied to at least one fibrous layer (abstract). Ness et al., further disclose larger multi-layer structures having fibrous layers attached to film layers (page 4, 5-10 and figure 2). Suitable fiber layers may be in the form of woven fabrics and chopped or continuous mats (page 7, 19-25). Suitable fibers include glass, carbon and polymeric (page 7, 8-15). With regard to claim 2, Ness et al., teach a lightweight fibrous layer weighing 20g/square meter (page 13, 27). In this instance, the Examiner considers the resin material sufficient to meet the limitations of the claimed surface material. The Examiner also considers the fibrous layers sufficient to meet the limitations of the claimed resin conducting and reinforcement layers. With specific regard to claim 4, since the Examiner is interpreting the resin conducting layer as comprising a single layer, it is the position of the examiner that a woven fabric is sufficient to meet the limitations presently set forth. With regard to claim 6, the prior art of Ness et al., does not specifically set forth the thicknesses of the individual resin film

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and the fibrous layers however, Ness et al., does clearly illustrate in figure 1 that the surface resin film is much thinner than the fibrous layers. As such, the Examiner considers such an illustration sufficient to meet the claimed limitations. With regard to claim 11, Ness et al., teach applying a resin gel coat to the surface of the moulding composite (page 13,5-10).

With specific regard to the “adapted to” limitations recited in claims 1, 3, 4,8,12 and 22, it has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

With regard to the “whereby” limitation in claim 22, it has been held that the functional “whereby” statement does not define any structure and accordingly cannot serve to distinguish. *In re Mason*, 114 USPQ 127,44 CCPA 937 (1957)

With regard to the processing viscosity, glass transition temperature, and thermal expansion property limitations recited in claims 3, 9, and 10, although the prior art of Ness et al., does not specifically teach the claimed features it is reasonable to presume that such properties/features are inherent to the invention of Ness et al. Support for said presumption is found in the use of like materials such as resin surface layers and thermoplastic woven layers which would provide the claimed processing viscosity, glass transition temperature, and thermal expansion property features. The burden is shifted to Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594

In addition, the presently claimed processing viscosity, glass transition temperature, and thermal expansion glass transition temperature features would obviously

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have been present once the Ness et al., composite is provided. *In re Best*, 195 USPQ at 433.

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Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 22, 2005

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TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700